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(71) Applicant (for all designated States except US): **SOPENENCO LTD. [IL/IL]**; GRANOT INTIATIVE CENTER, 38100 D.N. HEFER (IL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ZUSMAN, Leonid** [IL/IL]; 20/32 YETZIAT EUROPA STREET, 35827 HAIFA (IL). **GOLDMAN, Michael** [IL/IL]; 6/2 MOTSA STREET, 52366 RAMAT GAN (IL). **ENTIS, Alan** [IL/IL]; 89 HAIM LEVANON STREET, 69345 TEL-AVIV (IL).

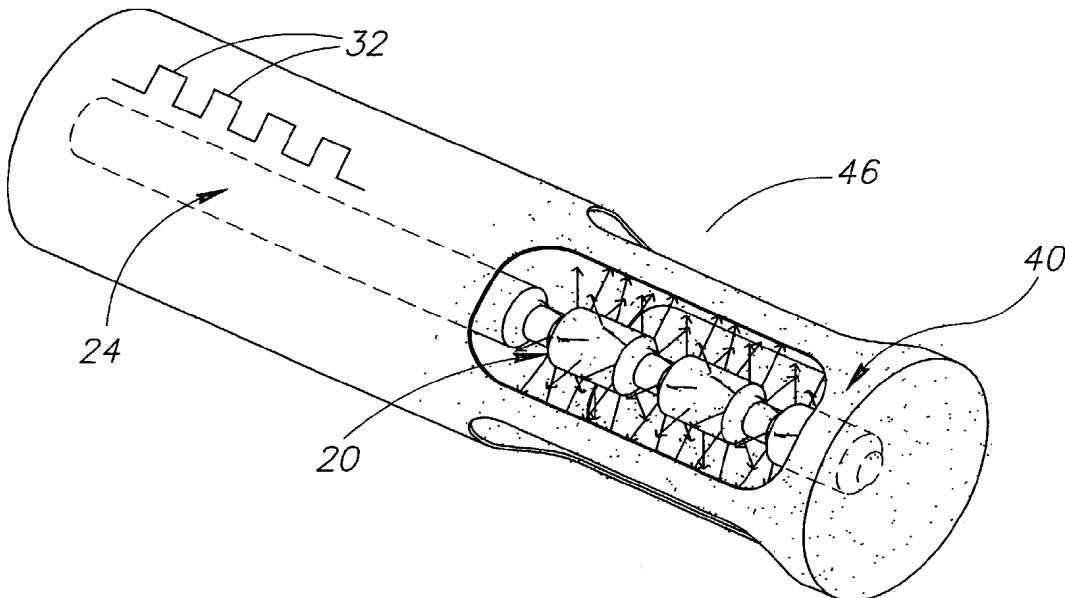
(74) Agents: **FENSTER, Paul** et al.; FENSTER & COMPANY, INTELLECTUAL PROPERTY 2002 LTD., P. O. BOX 10256, 49002 PETACH TIKVA (IL).

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[Continued on next page]

(54) Title: ULTRASONIC DRUG-DELIVERY SYSTEM



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(57) Abstract: Apparatus for delivering a drug to a target site of a body comprising: a dispersing member adapted to vibrate when acoustically excited; a source of acoustic energy controllable to couple acoustic energy to the dispersing member to excite it to vibrate; and a drug adhered to the dispersing member so that when the acoustic source excites the dispersing member, the drug is dispersed therefrom.

**Published:**

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/IL2004/001133

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61M37/00 A61M25/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 A61M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category [°]	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 735 811 A (BRISKEN ET AL) 7 April 1998 (1998-04-07)	1-7,10, 11, 36-39,42
A	column 7, lines 9-13 column 8, line 23 - column 11, line 7; figures 1-5,13 -----	8,9,41
X	WO 96/04955 A (CORTRAK MEDICAL, INC) 22 February 1996 (1996-02-22)	1-3,10, 11, 36-39,42
A	page 22, line 11 - page 25, line 29 page 31, line 3 - page 32, line 20; figures 7A-10 -----	4-9,41
X	US 2003/229304 A1 (BABAEV EILAZ) 11 December 2003 (2003-12-11) the whole document ----- -/-	1,2, 36-39

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

[°] Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the International search

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2230 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl
Fax: (+31-70) 340-3015

Authorized officer

Ceccarelli, D

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IL2004/001133

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/040501 A1 (NEWMAN CHRISTOPHER M.H ET AL) 27 February 2003 (2003-02-27) paragraphs [0038], [0039] -----	1,2, 36-39
X	US 6 135 976 A (TACHIBANA ET AL) 24 October 2000 (2000-10-24) column 5, lines 1-19 column 9, lines 15-30; figure 1L -----	1,36-39
X	US 2002/138037 A1 (WEIMANN LUDWIG J) 26 September 2002 (2002-09-26) the whole document -----	1,36-39

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IL2004/001133

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: 44-47 because they relate to subject matter not required to be searched by this Authority, namely:
Rule 39.1(iv) PCT - Method for treatment of the human or animal body by therapy. The delivery of a drug to a body is a method for treatment practised on the human body.
2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-11, 36-39, 41, 42

Remark on Protest

The additional search fees were accompanied by the applicant's protest.
 No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-11,36-39,41,42

Apparatus for delivering a drug with a dispensing member in the form of an elongate body with varying cross section along its length, a source of acoustic energy and a drug adhered to the dispensing member.

2. claims: 1,12-35,40,43

Apparatus for delivering a drug with a dispensing member in the form of a coil, a source of acoustic energy and a drug adhered to the dispensing member.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/IL2004/001133

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